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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2008*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This communication is responsive to amended application filed on 10/16/2008.

2.   Claims 1-22 are presented for examination.

Response to Arguments

3.   Applicants are thanked for amendment/Remarks.

4.   Applicant's amendment relating to 112 rejection is persuasive and therefore the

rejection is **withdrawn**.

5.   Applicant's argument relating to art rejection is not persuasive.

    a.   Applicants argue:

        "[0009] Kushler discloses that "[t]he system of the present invention allows the user to input a word of text without having to set the stylus down on the screen to contact an intended letter and then lift the stylus from the screen again before contacting the next letter - **i.e., without having to "tap" each letter**."

        It is unclear what applicant mean by this. Does this mean Kushler enter the letters without "tapping" the letters. Is it possible to enter the letters without "tapping" each letters? If there is a touch screen having a virtual keyboard, there must be a "TAPPING" process to input each letter using the virtual keyboard.

        Regardless, Kushler clearly discloses:

        *...**to enter either word,** **the user would contact the** **touch-screen** **at or near the key associated with the letter** "f" pass through or near the key associated with the letter*

"e" move the stylus to or near the key associated with the

letter "l". ...(see: Col. 10 lines 32-38),

also,

*... the user proceeds to **continue tapping the***

***keyboard,** then the sequence of **taps** generates word*

*objects...**the tap location letters** concatenated in the*

sequence that corresponding keys are tapped (the "tap

***location word"**....*(See: Col. 20 lines 20-26).

b.   Applicants argue:

"[0023] The Office Action argues that Kushler teaches "at least two tapped landing points", as recited by the claims, are represented by landing points 2212, 2214, 2216, and 2218 of Fig. 2B.

[0024] Applicants respectfully disagree that 2212, 2214, 2216, and 2218 of Fig. 2B of Kushler are analogous to the tapped landing points of the invention."

In response, as indicated in previous office action, Kushler et al clearly

discloses at least two tapped landing points. For example, Figure 2B clearly shows four

tapped landing points. Further, in order an input pattern analysis to operate, then there

should be more than one tapped landing points to output potentially matching words

from the database corresponding to letters of the word tapped or entered.

Further, Kushler et al clearly discloses:

*...**to enter either word,** **the user would contact the touch-***

***screen at or near the key associated with the letter** "f" pass*

through or near the key associated with the letter "e" move the

stylus to or near the key associated with the letter "l"....(see:

Col. 10 lines 32-38), i.e. analogous to at least two tapped landing points,

Also,

      ... the user proceeds to ***continue tapping the***

keyboard, *then the* ***sequence of taps*** (i.e. at least two tapped landing points

as claimed invention) *generates word objects...* ***the tap location***

letters *concatenated in the* ***sequence that corresponding keys are***

tapped (the "tap location word"....(See: Col. 20 lines 20-26).

    c.   Applicants argue:

    "[0027] The Office Action further argues that Kushler teaches "tapped landing points", as recited by the claims, are represented by landing points 2502, 2504, 2506, and 2508 of Fig. 2E.

    [0028] Applicants respectfully disagree that 2502, 2504, 2506, and 2508 of Fig. 2E of Kushler are analogous to the tapped landing points of the invention."

    In response, Kushler clearly discloses:

Further, Kushler et al clearly discloses:

    *...***to enter either word,*** ***the user would contact the touch-***

screen at or near the key associated with the letter *"f"* ***pass***

through or near the key associated with the letter *"e"* ***move the***

stylus to or near the key associated with the letter "l"....(see:

Col. 10 lines 32-38), i.e. analogous to at least two tapped landing points,

    Also,

        ... the user proceeds to ***continue tapping the***

keyboard, *then the* ***sequence of taps*** (i.e. at least two tapped landing

points as claimed invention) *generates word objects...**the tap***

location letters** concatenated in the **sequence that

corresponding keys are tapped (the "tap location word"....(See:

Col. 20 lines 20-26).

Further, Figs. 2B or 2E are showing tapped landing points of letters (such as

landing points of 2212, 2214, 2216, 2218 of Fig. 2B or 2502, 2504, 2506, 2508 of Fig.

2E).

d.   Applicant's lines of argument on par [0032] are not persuasive.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they

amount to a general allegation that the claims define a patentable invention

without specifically pointing out how the language of the claims patentably

distinguishes them from the references.

Further, the limitations are clearly mapped in claim rejection below and

therefore they are not further addressed.

e.   Applicants argue:

[0034] Applicants readily concede that the taps of Kushler, described immediately above, are analogous to the tapped landing points of the invention. However, the question remains as to whether Kushler's taps are, as described by the invention, used as inputs to a geometric pattern recognition process that "corrects" taps, which have landed outside of the intended letter keys for a word in a lexicon.

[0035] Kushler's description, "a word object comprised of the tap location letters concatenated in the sequence that the corresponding keys are tapped", teaches that his taps are literally used to construct a string of letters, as would a conventional touch screen keyboard. **That is, if the tapped keys were *t-h-o-s*, then the "word object" of Kushler is *"thos"*, and not *"this"*, which is a possible result of the invention**.

In response, examiner respectfully disagrees. Kushler et al does not only

output what applicants indicated, but also all possible outcomes based on the

landing points in this case the inflection points. For example, in Fig. 2B the

system is outputting the more likely matches that closer to the corresponding

letter of the word such as "text", "test", "rest" , or "great" to the determined

location of 2212, 2214, 2216, and 2218.

f.   Applicants' argued that there is no error correction process in Kushler's et

al.

  In response to applicant's argument that the references fail to show certain

features of applicant's invention, it is noted that the features upon which applicant

relies are not recited in the rejected claim(s). Although the claims are interpreted

in light of the specification, limitations from the specification are not read into the

claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

  For a sake of argument, Kushler et al clearly discloses...*the pattern*

matching component **compares** **the position** *of the inflection*

points extracted ...**adjusting the location** *of the*

inflection points extracted from the input pattern

according to these detected habitual pattern of input...

(See: Col. 19 lines 16-27)*,* which is analogous to error correction process*.*

g.   Applicant's lines of argument on par [0041] are not persuasive.

  Applicant's arguments fail to comply with 37 CFR 1.111(b) because they

amount to a general allegation that the claims define a patentable invention

without specifically pointing out how the language of the claims patentably

distinguishes them from the references.

Further, the limitations are clearly mapped in claim rejection below and

therefore they are not further addressed.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7.   Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Patent

No. 7, 098, 896 issued to Kushler et al (Publication No. 2004/0140956 A1).

8.   As per Claim 1, Kushler et al discloses a method of relaxing typing accuracy on

a keyboard, said method comprising:

recording a sequence of at least two tapped landing points on said keyboard,

each of said sequence of at least two tapped landing points having a coordinate, and

said sequence of at least two tapped landing points corresponding in a one-to-one

manner to a sequence of correctly or incorrectly entered letters of a word, and a tapped

space bar that delimits said word (such as *...the system records the sequence of points*

of contact detected by the touch-screen...; See: Col. 8 lines 11-15, Col. 20 lines 20-26);

counting a number of correctly or incorrectly entered letters of said word (such as

...records the sequence of points...; See: Col. 8 lines 13-15);

selecting all words of a lexicon having a number of letters equal to said number

of correctly or incorrectly entered letters of a said word (such as *...after the input pattern*

analysis component identifies the inflection points associated with an input pattern, the

pattern matching component examines the words stored in the system database to

determine which words are the most likely matching candidates...; (See: Col. 12 lines

61-65)...*the words identified as the most likely candidates by the pattern matching*

component are offered to the user for selection by a word selection component...(See:

Col. 18 lines 3-6); *for example see Fig. 2D the number of letters equal to the number*

correctly entered letters also Fig. 2B));

comparing a geometric pattern (such as *pattern matching*) formed by said

sequence of at least two landing points, excluding said tapped space bar, to another

geometric pattern formed by said sequence of correctly or incorrectly entered letters for

each selected word of said all words of a lexicon having a number of letters equal to

said number of correctly or incorrectly entered letters by calculating a distance measure

between said geometric pattern formed (such as *...after the input pattern analysis*

component identifies the inflection points associated with an input pattern, the pattern

matching component examines the words stored in the system database to determine

which words are the most likely matching candidates...; (See: Col. 12 lines 61-65) by

said sequence of at least two landing points (such as...*the expected path length for a*

word is calculated as the sum of the distances between the centers of the keys...;See:

Col. 13 lines 26-44), excluding said tapped space bar, and said another geometric

pattern formed by letters said sequence of correctly or incorrectly entered letters for

each selected word of said all words of a lexicon having a number of letters equal to

said number of correctly or incorrectly entered letters (...*the words identified as the*

most likely candidates by the pattern matching component are offered to the user for

selection by a word selection component...(See: Col. 18 lines 3-6; *for example see Fig.*

2D the number of letters equal to the number correctly entered letters));

determining a word from said selected all words of a lexicon having a number of

letters equal to said number of correctly or incorrectly entered letters by selecting

determining a shortest distance measure between said geometric pattern formed by

said sequence of at least two tapped landing points, excluding said tapped space bar,

and said another geometric pattern formed by said sequence of correctly or incorrectly

entered letters for said determined word (such as ...*the word selection component*

calculates a running average of the ratio of the actual measured length of the input

pattern to the expected input path ...*based on the expected input path length*...*the*

system determines which words in the database qualify as potentially matching

candidates...; See: Col. 13 lines 55-67); and

displaying, to a user, one of said determined word and said sequence of correctly

or incorrectly entered letters of said word to check a correct spelling (such as *displaying*

the word "text", "test", "rest", for the tapping sequence of #2212-#2218...; See: Fig. 2B).

9.   As per Claim 2, Kushler et al discloses the method according to claim 1, wherein

said distance measure comprises a mean distance based on summing a distance

between each landing point coordinate and each corresponding center point coordinate

of said correctly or incorrectly entered letters and said number of letters in said each

selected word (such as *...the expected path length for a word is calculated as the sum of the distances between the centers of the keys associated with the letters...*; See: Col. 13 lines 32-35).

10.   As per Claim 3, Kushler et al discloses the method according to claim 1, wherein said distance measure comprises an elastic matching distance between each landing point coordinate and each corresponding center point coordinate of said correctly or incorrectly entered letters (such as...*the expected path length for a word is calculated as the sum of the distances between the centers of the keys...*; See: Col. 13 lines 26-44).

11.   As per Claim 4, Kushler et al discloses the method according to claim 3, further comprising normalizing said elastic matching distance by said number of letters in said each selected word (such as *...identifying the optimal matching between the M letters and of a candidate word and the N identified inflection points and input pattern path segments is a variant of the "short path" problem which is well known in the field of dynamic programming...*; See: Col. 15 lines 43-60).

12.   As per Claim 5, Kushler et al discloses the method according to claim 1, further comprising comparing said shortest total distance measure to a threshold (such as...*the expected path length for a word is calculated as the sum of the distances between the centers of the keys...*;See: Col. 13 lines 26-44).

13.   As per Claim 6, Kushler et al discloses the method according to claim 5, further comprising displaying said determined word, if said shortest distance measure is smaller than said threshold otherwise displaying said sequence of correctly or

incorrectly entered letters (such as *displaying the word "text", "test", "rest", for the*
tapping sequence of #2212-#2218...; See: Fig. 2B).

14.   As per Claim 7, Kushler et al discloses the method according to claim 1, wherein
each tapped landing point comprises moving a finger or a stylus from a first position not
contacting said keyboard, to a second position contacting said keyboard at said each
landing point, and to a third position not contacting said keyboard (such as *...the user*
proceeds to continue tapping the keyboard, then the sequence of taps generates a word
object...following the second tap, this words composed of the tap location letters...;
See: Col. 20 lines 20-26).

15.   As per Claim 8, Kushler et al discloses a method of relaxing typing accuracy on a
computer keyboard, said method comprising:

      recording sequence of at least two tapped landing points on said keyboard, each
of said sequence of at least two tapped landing points having a coordinate, and said
sequence of at least two tapped landing points corresponding in a one-to-one manner to
a sequence of correctly or incorrectly entered letters of a word, and a tapped space bar
that delimits said word (such as *...the system records the sequence of points of contact*
detected by the touch-screen...; See: Col. 8 lines 11-15);

      counting a number of correctly or incorrectly entered letters of said word (such as
...records the sequence of points...; See: Col. 8 lines 13-15);

      selecting all words of a lexicon having a same number of letters equal to said
number of correctly or incorrectly entered letters of said word (such as *...after the input*
pattern analysis component identifies the inflection points associated with an input

pattern, the pattern matching component examines the words stored in the system database to determine which words are the most likely matching candidates...; (See: Col. 12 lines 61-65)...*the words identified as the most likely candidates by the pattern matching component are offered to the user for selection by word selection component...*(See: Col. 18 lines 3-6));

for said all words having said number of letters, computing a distance between a landing point coordinate and a corresponding center point coordinate of said correctly or incorrectly entered letter of said word for each landing point in said sequence of at least two tapped landing points (such as *...the location of each displayed texts character key is defined by the screen coordinates of the center of the key, which is the location used when determining the distance of letter associated with the key...*;See: Col. 8 lines 25-31, Col. 20 lines 20-26);

for each word of said all words having said number of letters, computing a mean distance based on summing each said distance between a landing point coordinate and a corresponding center point coordinate of said correctly or incorrectly entered letter of said each word and said number of letters in said each word (such as *...the expected path length for a word is calculated as the sum of the distances between the centers of the keys associated with the letters...*; See: Col. 13 lines 30-35); and

determining a word from said selected all words of a lexicon having a number of letters equal to said number of correctly or incorrectly entered letters by determining a shortest mean distance between said sequence of at least two landing points, excluding said space bar, and said sequence of correctly or incorrectly entered letters for said

determined word (such as *...the word selection component calculates a running average of the ratio of the actual measured length of the input pattern to the expected input path ...based on the expected input path length...the system determines which words in the database qualify as potentially matching candidates...*; See: Col. 13 lines 55-67); and

displaying, to a user, said determined word and said sequence of correctly or incorrectly entered letters of said word to check a correct spelling (such as *displaying the word "text", "test", "rest", for the tapping sequence of #2212-#2218...*; See: Fig. 2B)..

16.   As per Claim 9, Kushler et al discloses the method according to claim 8, wherein said keyboard comprises one of a physical keyboard, a virtual keyboard, a stylus keyboard, a graphical keyboard, and a touch-screen (such as *..virtual keyboard or touch-screen..*; See: Fig. 2A).

17.   As per Claims 10-22, the instant claims recite substantially same limitation as the above rejected claims 1-7, and 9, and therefore rejected under the same rationale.

Conclusion

18.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

19.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to KIBROM K. GEBRESILASSIE whose telephone number

is (571)272-8571. The examiner can normally be reached on 8:00 am - 4:30 pm

Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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